

TORREYA

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The Distribution of *Silene Wherryi* Small

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Two years ago Dr. John K. Small¹ described and named in my honor a new species of *Silene* which had been observed on limestone rocks in Kentucky, and which was represented in herbaria also from Albertville, Alabama. In a private communication Dr. Roland M. Harper subsequently called my attention to the fact that the rock at the latter place is sandstone rather than limestone, and suggested the desirability of further study of the habitat of the plant. In the Spring of 1928 such study proved possible. Accompanied by Mr. J. E. Benedict, Jr., of Washington, D. C., I drove across Alabama, visiting promising localities, and finding several new stations for it. A detailed account of its field relations can accordingly now be put on record.

Although in previous years confused with *S. caroliniana* Walter, the new species can be readily differentiated from that, even upon superficial examination in the field. The plants of *S. Wherryi* average rather larger; the petals are less notched at the tip, and their crown is less conspicuous; the calyx is densely covered with lustrous hairs which are quite free from glands, while in *S. caroliniana* the hairs are fewer but largely gland-tipped, so that minute insects and dust-particles are often found adhering to them. The two species are apparently quite distinct in geographic range.

While the flower-color at the Kentucky stations, where the plant first attracted my attention, was bright rose (around Ridgway's No. 71b), all of the Alabama colonies seen showed paler colors, ranging from No. 71f to white; the original description should accordingly be amended to include this color range, especially in that the type locality, Albertville, yields par-

¹ *Torreyia*, 26:65. 1926.

ticularly pale forms. The details of its distribution, by states and counties, in alphabetical order, follow.

ALABAMA

Autauga County.—In this Coastal Plain county *Silene Wherryi* was first discovered by Dr. Roland M. Harper on April 22, 1928, in moderately rich woods about 2 miles southwest of Booth. On April 28 Mr. Benedict and I found it sparingly in open oak woods on gravelly soil 4 miles southeast of Marbury, near the northeastern corner of the county, the soil reaction proving to be subacid.

Bibb Co..—A large colony of the plant was observed on April 25 on wooded slopes 4 miles north of Centerville. This locality is in the Appalachian Valley physiographic province close to the Fall Line, and the rock is sandstone, the soil being minimacid.

Cullman Co..—The specimen from Cullman cited by Mohr² under the name *Silene caroliniana* is now in the National Herbarium, and proves to represent the new species. We were unable to locate any *Silene* in that region.

Elmore Co..—On thinly wooded sand-hills just below the Fall Line about 8 miles east of Wetumpka this *Silene* was found in abundance on April 27, the soil reaction proving to be subacid. It is associated with a dwarf *Phlox*, which had been discovered there by Dr. Harper in July, 1927, and which was found, on examination of the few flowers remaining in late April, to represent the species listed in Small's Flora of the Southeastern United States as *P. Hentzii* Nuttall, not definitely known elsewhere in the State.

Etowah Co..—In the National Herbarium there is a specimen from Gadsden, although we did not find any there on this trip.

Jefferson Co..—The steep sandstone ridges around Birmingham support extensive colonies of this *Silene*, and we collected it on April 28 on the southeast side of Shades Mountain about 5 miles south of the city. The reaction was again subacid. Dr. Harper also reports observing it from the train between Monmouth and Trafford in this county.

Marshall Co..—In describing *Silene Wherryi* as a new species, Dr. Small designated as type the best preserved specimen in the

² Plant life of Alabama, 497. 1901.

New York Botanical Garden herbarium, which had been collected by J. B. Hobdy of an "Alabama Biological Survey" party at Albertville in this county April 22, 1899. A visit there on April 30, 1928, disclosed that while the region is now largely under cultivation, colonies of the plant still persist on the banks of Drum Creek, 2½ miles northwest of the town. It grows in minimacid soil on ledges of a somewhat calcareous sandstone, exposed where the stream has cut down into the surface of the Sand Mountain plateau.

KENTUCKY

Franklin Co.—The Gray Herbarium possesses a specimen labeled "Frankfort. May" but without other data, and also another, collected by Griswold, but lacking definite locality and date.

Garrard, Jessamine, and Mercer Counties.—Near the Kentucky river, in these counties, *Silene Wherryi* grows on wooded ravine-slopes, and locally on limestone ledges. Deep-colored flowers are here the rule, and the soil reaction is neutral or essentially so.

MISSOURI

Phelps Co.—A specimen of *Silene* in the herbarium of the New York Botanical Garden, collected by J. H. Kellogg at Jerome, in this county in the Ozarks, April 28, 1914, proves to represent the new species.

Pulaski Co.—On April 14, 1928, Mr. J. E. Benedict Jr. found the same species 10 miles northeast of Waynesville. Its color is deep pink, and the soil reaction is minimacid.

NORTH CAROLINA

Macon Co.—A specimen collected by T. G. Harbison at Highlands, in May 1912, preserved in the Gray Herbarium, shows the characters of *S. Wherryi*.

TENNESSEE

The only *Silene* seen from this state is typical *S. caroliniana*, kindly sent to me by Professor H. M. Jennison from Elizabethton, in Carter County, far over to the east. Search through the central part of the state, however, would no doubt disclose

the presence there of the new species, connecting the colonies in adjoining states.

Specimens representing the new finds have been deposited in the U. S. National Herbarium. The distribution of *Silene Wherryi* can now be summarized as follows:

On thinly wooded rocky or gravelly slopes, in neutral to moderately acid soils, in the inner part of the Coastal Plain and in various other physiographic provinces, Alabama to central Missouri, northern Kentucky, and western North Carolina.

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Notes on the Distribution of *Dionaea*

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In the July number of the Journal of the Elisha Mitchell Scientific Society (43: 221-228, pl. 33) Dr. W. C. Coker discusses the distribution of *Dionaea muscipula* (Venus's fly-trap), and shows the known localities (in about 14 counties in North Carolina and two in South Carolina) on a map. He also mentions several unverified and presumably erroneous reports of its occurrence outside of its present known range. To the list of unverified stations should be added one much more remote than any mentioned by Dr. Coker.

Philip Henry Gosse, an English naturalist (father of Edmund Gosse, the poet), spent the greater part of the year 1839(?) teaching at Pleasant Hill, Alabama, which is in the eastern edge of Dallas County, and near the southern edge of the black belt, the most fertile region in the state. After returning to England he published a small illustrated volume of 318 pages, entitled "Letters from Alabama, (U. S.) chiefly relating to natural history" (London, 1859), containing observations on plants, animals and people that he saw, in the form of a diary. On page 192, under date of July 5, he mentions *Dionaea*, and describes it in such a way as to show that he did not mistake a *Drosera* or *Sarracenia* for it (as some of the writers quoted by Dr. Coker may have done).

The average reader would naturally infer from this that he found the plant growing in the neighborhood; but he gives no locality or habitat for it, and he may have seen it cultivated in England and described it from memory, or even copied a